

# Micro Business Innovation Survey 2024



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# 1 Key Takeaways

The Micro Business Innovation Survey (MBIS) is a voluntary telephone survey of 1,000 businesses in Northern Ireland that have between 1 and 9 employees. Some key takeaways from the 2024 edition of the survey are as follows:

- Overall, there was a significant decrease in innovation rates amongst micro businesses when compared to 2014, with the number of innovation active businesses dropping to 47% from 56%, and the number of broader innovators declining to 59% from 86%.
- Higher rates for innovation activity and broader innovation were evident amongst those: trading for five years or less, those with 5-9 employees, those whose most senior person was educated to HND level or higher, those that had at least one female owner, those that had turnover in excess of £250k in 2023, and those that had markets outside Northern Ireland.
- Considerably fewer micro businesses had invested in innovation-related activities when compared to 2014, with the most notable decreases occurring in computer hardware (down to 14% from 55%), training for innovation activities (down to 5% from 40%), and computer software (down to 22% from 52%) investment.
- Amongst product innovators, process innovators, those with ongoing innovation activities and those who had abandoned them, there was a notable decrease when compared to 2014 in the number that had co-operated with external partners for innovation purposes.
- More than four in five innovation active micro businesses cited a factor that restricts innovation activity, with around seven in ten having referenced more than one.

# 2 Executive Summary

The Micro Business Innovation Survey (MBIS) is a voluntary telephone survey of 1,000 businesses in Northern Ireland that have between 1 and 9 employees. The purpose of the survey is to assess levels of innovation amongst these businesses.

The 2024 edition of the survey was conducted 11th January – 3rd April and covered the years 2021-2023, a period in which businesses were operating in an extremely demanding environment on account of a number of macroeconomic issues, including continuing fallout from the Covid-19 pandemic, challenges related to the exit of the United Kingdom (UK) from the European Union (EU), and the increasing costs of doing business. It is perhaps unsurprising therefore, that levels of innovation amongst micro businesses decreased in all but one category (process innovation) when compared to the results from the previous iteration of the MBIS conducted in 2014. However, in spite of the economic challenges of the 2021-2023 period, 47% of micro businesses were innovation active during this time, 59% were broader innovators, 21% were product innovators, 11% were process innovators, whilst 37% were wider innovators. Furthermore, the percentage of businesses in the innovation active, broader innovator and product innovator categories was higher than that for the small to large firms surveyed in the 2023 UK Innovation Survey.

The businesses that had higher rates for innovation activity tended to be: those trading for five years or less, those with 5-9 employees, those whose most senior person was educated to HND level or higher, those that had at least one female owner, those that had turnover in excess of £250k in 2023, and those that had markets outside Northern Ireland.

It is evident that innovation can yield financial benefits for micro businesses. Amongst those that were innovation active, it was believed that an average of 15% of their export sales in the 2021-2023 period could be attributed to innovation. Amongst process innovators, nearly two in five (35%) stated that the changes they made during this time had led to cost savings, with around 29% of this group expecting these savings to increase in the next 12 months.

However, more than four in five (84%) innovation active micro businesses cited a factor that restricts innovation activity, with 72% having referenced more than one barrier. The cost of doing business (40%), disruption due to Covid-19 (39%) and a lack of available people and time (35%) were the most likely barriers to be mentioned. Around three in ten referenced the cost of finance (32%), the availability of finance (31%) or the high direct costs of innovation (31%), whilst nearly a fifth (16%) felt that a lack of government support restricted their ability to innovate. UK regulation and standards were considered a barrier by 13%, whilst 10% felt this way about EU regulations and standards.

In terms of broader innovation, only a small number of these businesses believed they were able to capitalise on any potential benefits from financial assistance (6%), non-financial support (14%), or collaboration with an external organisation (12%).

Across all micro businesses, there was a considerable decline in investment activity when compared to 2014, with the most notable decreases evident occurring in computer hardware (down to 14% from 55%), training for innovation activities (down to 5% from 40%), and computer software (down to 22% from 52%) investment. Additionally, the number that made major changes relating to marketing concepts and strategies decreased (down to 21% from 30%), as did business practices (down to 15% from 23%).

## 3 Introduction

## 3.1 About the Micro Business Innovation Survey

The Micro Business Innovation Survey (MBIS) is a voluntary telephone survey of 1,000 businesses in Northern Ireland that have between 1 and 9 employees. The purpose of the survey is to assess levels of innovation amongst these businesses.

The survey was first conducted in 2014<sup>1</sup>. However, the findings from this edition have become dated and precede significant macro-economic changes, such as the UK's EU Exit and the Covid-19 pandemic. With micro businesses constituting 85.1% of all businesses with employees in Northern Ireland (NI), it was deemed by the Department for the Economy to be both timely and necessary to gather updated data, which would inform policy and programme development aimed at increasing innovation levels across the region in support of increasing productivity and other economic priorities.

The 2024 MBIS was conducted 11th January – 3rd March 2024 and covered the three-year period 2021-2023, meaning that the recall period for respondents was immediately before the fieldwork. This was not the case for the 2014 edition, when fieldwork was conducted over a year later, which may have had an impact on the accuracy of respondent recollections.

In keeping with the 2014 survey, quota targets were employed during the 2024 MBIS to ensure achievement of a representative sample of micro businesses within the SIC 2007 sectors of Production & Construction (Codes B-F) and Distribution & Services (Codes G-N). Sole trader businesses, the public sector, and the agriculture, forestry and fishing sector were excluded. A breakdown of the sample achieved is detailed in the Appendix of this report.

To allow for like-for-like comparisons to be made, the questionnaire used for the 2024 MBIS was based largely on that used for the 2014 edition and focussed on the following topics: adoption of innovation through new and improved products, services, and processes; changes in business organisation; investments in different types of innovation; assistance and co-operation for innovation; and barriers to innovation.

The questionnaires used for both the 2014 survey and the 2024 MBIS were influenced heavily by the UK Innovation Survey (UKIS)<sup>2</sup>, which is the main data source for business innovation in the UK. In this report, some comparisons have been made with the NI results from the 2023 UKIS. However, caution should be exercised when considering such findings as the different sample (businesses with 10 or more employees), sample methodology (probability as opposed to quota) and

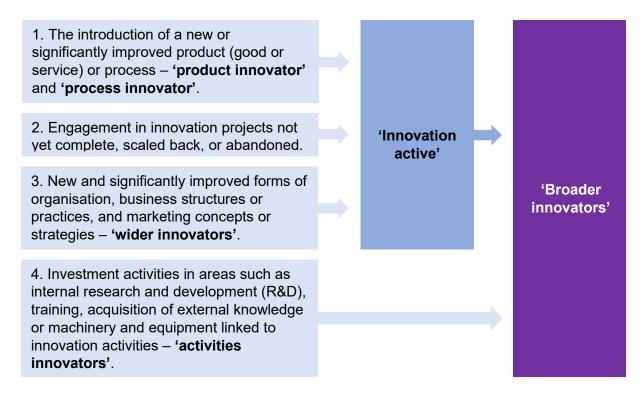
<sup>&</sup>lt;sup>1</sup> https://www.economy-ni.gov.uk/publications/micro-business-innovation-survey

<sup>&</sup>lt;sup>2</sup> https://www.gov.uk/government/collections/uk-innovation-survey

survey methodology (primarily online) of the UKIS are undoubtedly influencing factors in the varying results between the two surveys. Furthermore, the surveys address different periods, with the 2023 UKIS covering 2020-2022.

### 3.2 Defining innovation

The definition of innovation used in the UKIS is based on an Organisation for Economic Co-operation and Development (OECD) definition, outlined in the Oslo Manual 2018<sup>3</sup>. This definition includes any of the following activities, if they occurred during the period covered by the survey:



'Innovation active' businesses are those which engaged in activities 1-3:

- 1. The introduction of a new or significantly improved product (good or service) or process 'product innovator' and 'process innovator'.
- 2. Engagement in innovation projects not yet complete, scaled back, or abandoned.
- 3. New and significantly improved forms of organisation, business structures or practices, and marketing concepts or strategies 'wider innovators'.

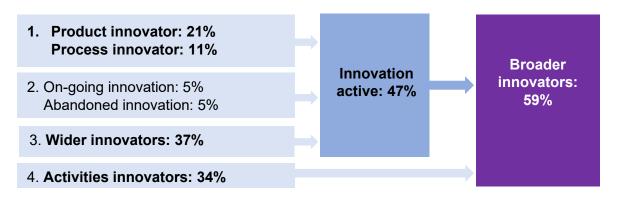
'Broader Innovators' encompass activities 1-3 but also activity 4:

4. Investment activities in areas such as internal research and development (R&D), training, acquisition of external knowledge or machinery and equipment linked to innovation activities – 'activities innovators'.

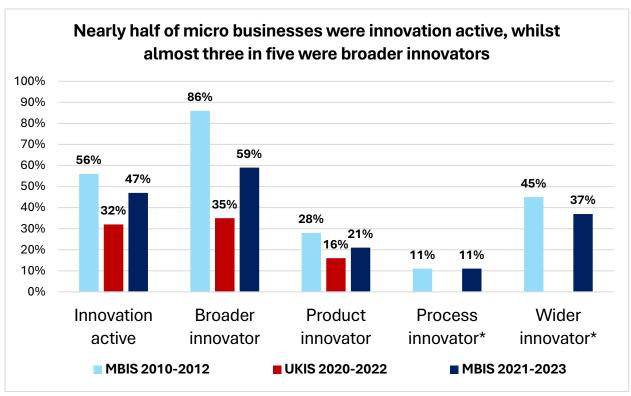
<sup>&</sup>lt;sup>3</sup> Oslo Manual 2018: Guidelines for Collecting, Reporting and Using Data on Innovation, 4th Edition | en | OECD

# 4 Findings

## 4.1 Overall innovation activity



Almost half (47%) of micro businesses were innovation active, 59% were broader innovators, whilst 37% were wider innovators, representing a decrease in each case when compared to the corresponding figure (56%, 86% and 45%, respectively) from 2014. The percentage of product innovators also declined (down to 21% from 28%) when compared to 2014, whilst the number (11%) of process innovators remained the same. However, the percentage of innovation active micro businesses, broader innovators and product innovators was higher when compared to the figures reported by the small to large firms in the 2023 UKIS.



\*Results from the 2023 UKIS for process innovator and wider innovator have not been included for comparison as the definition of these categories differed from the MBIS 2014 and the MBIS 2024.

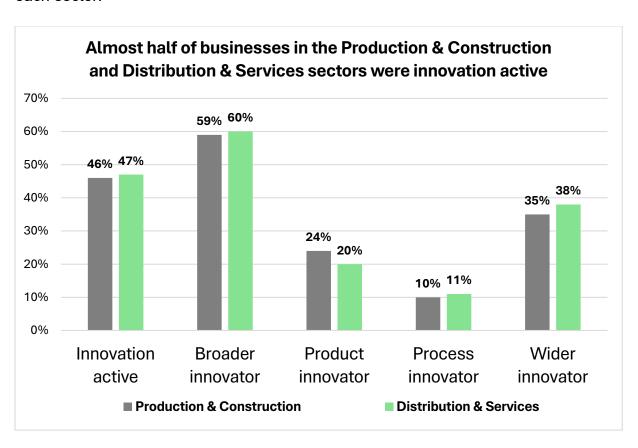
## 4.2 Innovation activity by sector

The sectors of interest for the 2014 MBIS, the 2023 UKIS and the 2024 MBIS were Production & Construction, and Distribution & Services.

**Production & Construction** industries include the following: mining and quarrying; food, clothing, wood, paper, publishing and printing; fuels, chemicals, plastic, metals and minerals; electrical and optical equipment; transport equipment; manufacture not elsewhere classified; electricity, gas and water supply; and construction.

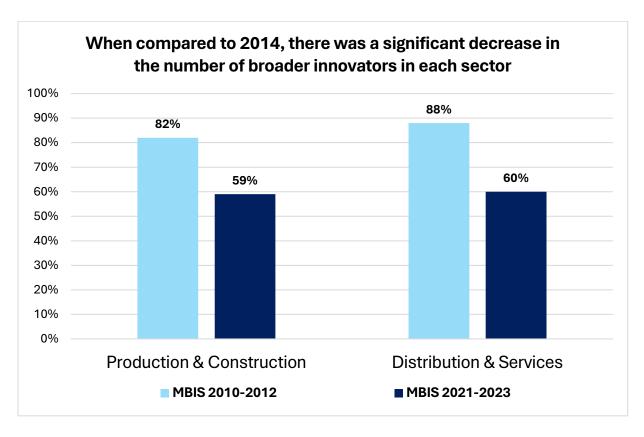
**Distribution & Service** industries include the following: wholesale trade (including cars and bikes); retail trade (excluding cars and bikes); transport, storage and communication; hotels and restaurants; financial intermediation; real estate, renting and business activities; and motion picture and video production.

Close to half (46%) of micro businesses in the Production & Construction sector were innovation active, whilst 59% were broader innovators; the respective figures for the Distribution & Services sector were 47% and 60%. Across the remaining categories, the percentage of businesses engaged in innovation was also similar for each sector.



When compared to 2014, there were significant decreases in the number of broader innovators (down to 59% from 82%) and activities innovators (down to 35% from 77%) in the Production & Construction sector.

Similarly, in the Distribution & Services sector, the number of broader innovators declined markedly (down to 60% from 88%), as did the number of activities innovators (down to 33% from 84%). There was also a decrease in the number of innovative active businesses (down to 47% from 58%) and in the number of wider innovators (down to 38% from 47%) in this sector.



Looking at the industries that make up each sector reveals notable declines in the number of broader innovators amongst the following: construction businesses (down to 58% from 83%); wholesale traders, including cars and bikes (down to 63% from 91%); retail traders, excluding cars and bikes (down to 59% from 76%); transport storage and communication businesses (down to 30% from 89%); and hotels and restaurants (down to 54% from 80%). On account of the small number of representatives from the other industries, caution should be exercised when making comparisons between 2014 and 2024.

Table 1: Percentage of businesses by industry that are broader innovators

	MBIS 2010-2012	MBIS 2021-2023
Production & Construction*	82%	59%
Food, clothing, wood, paper, publishing and printing	67%	65%
Fuels, chemicals, plastic, metals and minerals	79%	64%
Electrical and optical equipment	82%	88%
Manufacturing not elsewhere classified	87%	43%
Electricity, gas and water supply	93%	50%
Construction	83%	58%
Distribution & Services	88%	60%
Wholesale trade (including cars and bikes)	91%	63%
Retail trade (excluding cars and bikes)	76%	59%
Transport, storage and communication	89%	30%
Hotels and restaurants	80%	54%
Financial intermediation	93%	71%
Real estate, renting and business activities	92%	64%
Motion picture and video production	100%	78%

<sup>\*</sup>Mining and quarrying and manufacturing of transport equipment not included as there were only a very small number of cases

#### 4.3 Characteristics of innovation active businesses

Almost half (47%) of micro businesses were innovation active. Similar to 2014, the micro businesses that had higher rates for innovation activity tended to: be trading for five years or less, be slightly larger in size (5-9 employees), have the most senior person educated to HND level or higher, have at least one female owner, have turnover in excess of £250k in 2023, have markets outside Northern Ireland. Regarding the last of these characteristics, the average estimate amongst innovative active micro businesses for the percentage of total sales outside NI that were due to innovation was 15%.

Table 2: Percentage of businesses by characteristic that are innovation active

Age of business	
Up to 5 years	61%
6-10 years	45%
11-20 years	47%
>20 years	44%
Highest qualification	
HND or higher	58%
Apprenticeship or NVQ	41%
A or AS Level	41%
GCSE or O Level	36%
Other	33%
None	25%
Size of business	
1-4	45%
5-9	54%
Exporter	
Yes	74%
No	41%
Turnover in 2023	
Up to £249k	44%
£250K-£499k	59%
£500K-£999k	55%
£1M+	61%
Markets	
Northern Ireland	47%
Great Britain	78%
Republic of Ireland	71%
Other	96%
Number of owners in daily control	
1 owner	41%
2 or more owners	64%
Number of female owners	
None	43%
1 owner	56%
2 or more owner	67%
Number of owners aged over 50	
None	45%
1 over 50	45%
2 or more over 50	59%

# 4.4 Product and process innovators

Around a fifth (21%) of micro businesses were product innovators. Amongst those in this group that introduced new or significantly improved goods, 29% reported that these were new to the market, whilst amongst those that introduced new or

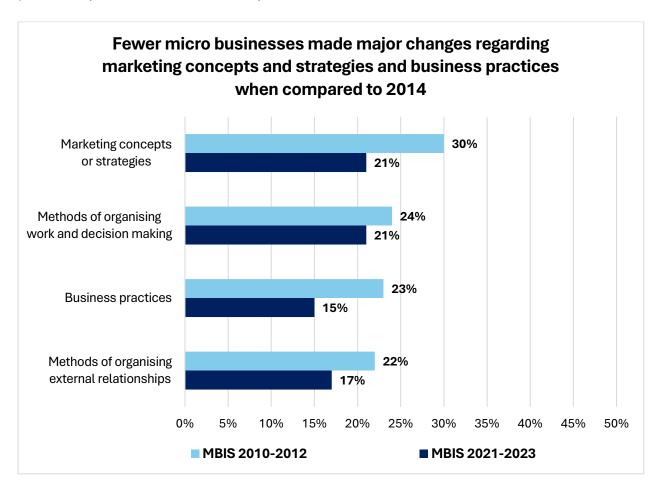
significantly improved services, 15% stated that these had been brought in before their competitors.

About one in ten (11%) micro businesses were process innovators. For nearly two in five (35%) of this group, the process changes that they made led to cost savings (ranging from 1-39%). However, for 28%, their costs actually increased, whilst 37% saw no change. Amongst those that did see cost savings, 29% thought that these would increase in the next 12 months, 5% anticipated a decrease, whilst 53% expected them to remain the same.

Close to a fifth (18%) of micro businesses were either product *or* process innovators, which was a notable decline when compared to the corresponding figure from 2014 (32%). Fewer than one in ten (7%) micro businesses were both product *and* process innovators, which was on par with the number (7%) who were so in 2014.

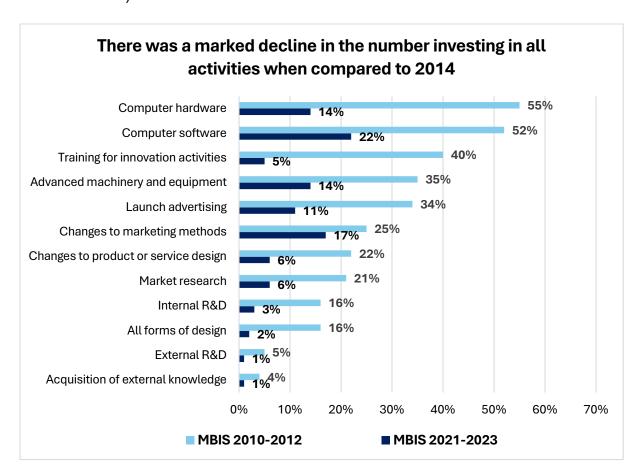
#### 4.5 Major organisational changes

Across all of the micro businesses surveyed, the number that made major changes regarding marketing concepts and strategies decreased (down to 21% from 30%) when compared to 2014, as did the number that made changes to business practices (down to 15% from 23%).



#### 4.6 Investment activity

Amongst all of the micro businesses surveyed, there was a considerable decline in the number investing in all activities when compared to 2014, with the most notable decreases evident regarding computer hardware (down to 14% from 55%), training for innovation activities (down to 5% from 40%), and computer software (down to 22% from 52%).



Perhaps unsurprisingly, micro businesses in the Production & Construction sector were more likely than those in the Distribution & Services sector to have invested in advanced machinery and equipment (22% compared to 11%).

Those in the Distribution & Services sector were more likely than those in the Production & Construction sector to have invested in the following: changes to marketing methods (20% compared to 11%), computer software (24% compared to 18%), and the launch of advertising (12% compared to 8%).

#### 4.7 Characteristics of broader innovators

Nearly three in five (59%) micro businesses were broader innovators. As with innovation activity, the micro businesses that had higher rates for broader innovation tended to be younger, larger, have higher 2023 turnover, have one or more female

owners, have the most senior person educated to HND level or higher, have markets outside Northern Ireland.

Table 3: Percentage of businesses by characteristic that are broader innovators

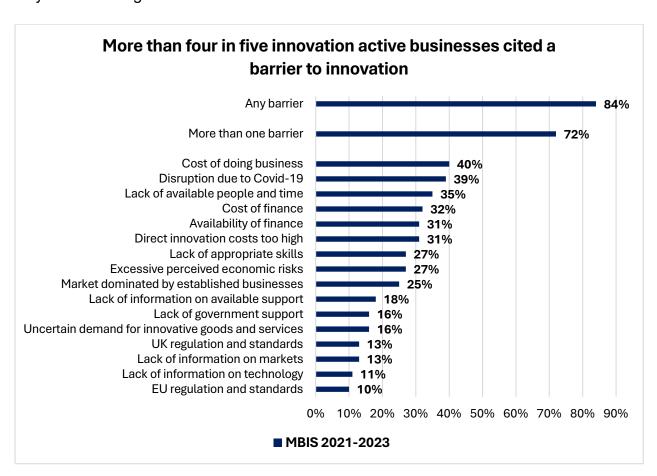
Age of business	
Up to 5 years	68%
6-10 years	57%
11-20 years	58%
>20 years	60%
Highest qualification	
HND or higher	71%
Apprenticeship or NVQ	56%
A or AS Level	52%
GCSES or O Level	46%
Other	33%
None	38%
Size of business	
1-4	58%
5-9	68%
Exporter	
Yes	86%
No	54%
Turnover in 2023	
Up to £249k	56%
£250K-£499k	77%
£500K-£999k	68%
£1M+	74%
Markets	
Northern Ireland	59%
Great Britain	85%
Republic of Ireland	87%
Other	100%
Owners in daily control	
1 owner	55%
2 or more owners	71%
Number of female owners	
None	57%
1 owner	65%
2 or more owner	78%
Number of owners over 50	
None	60%
1 over 50	57%
2 or more over 50	66%

## 4.8 Barriers to innovation

More than four in five (84%) innovation active micro businesses cited a barrier to innovation, with 72% mentioning more than one.

The most common barrier to be referenced was the cost of doing business (40%), followed closely by disruption due to Covid-19 (39%), then a lack of available people and time (35%). Around three in ten mentioned the cost of finance (32%), the availability of finance (31%) or the high direct costs of innovation (31%) as barriers.

Around a fifth (18%) of innovative active micro businesses felt that a lack of information on available support was a barrier to innovation, whilst 16% felt that a lack of government support restricted their ability to innovate. For about one in eight (13%), UK regulation and standards were a barrier to innovation, whilst 10% felt this way about EU regulations and standards.



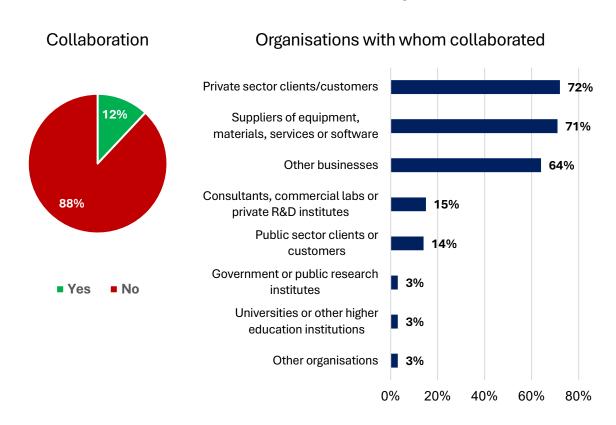
## 4.9 Co-operation

The UKIS defines co-operation as occurring when 'two or more participants agree to take responsibility for a task or series of tasks and information is shared between the parties to facilitate the agreement'. With regards to innovation, 'a business co-operates with another business if it procures ideas or inputs from the other business, by providing it with a detailed specification of its needs'.

About one in eight (12%) broader innovators had co-operated with an external partner in the last 12 months to help with product/service development or organisational changes. The organisations most likely to collaborate were private sector clients/customers (72%), suppliers of equipment, materials, services of software (71%), and other businesses (64%). Nine in ten (90%) of those who collaborated did so with an external partner based in NI, 15% worked with an organisation in GB, whilst only a very small number co-operated with organisations from the Republic of Ireland (3%), elsewhere in the EU (3%) or the rest of the world (1%).

In 2014, the analysis regarding co-operation focussed on micro businesses that were product innovators, process innovators, and/or those who abandoned and/or had ongoing innovation activities. Amongst this group, 65% had co-operated with an external partner; the corresponding figure for 2024 was much lower at 14%.

# Only a small number of broader innovators had collaborated with an external partner



#### 4.10 Assistance

Only 6% of broader innovators received financial assistance for their innovation activities, with Invest NI (55%) the organisation most likely to have provided this monetary help. Only 2% of broader innovators received R&D tax credits.

About one in seven (14%) broader innovators received non-financial help for innovation activities, with local councils (58%) the most likely source, followed by consultants (27%), Invest NI (26%), then Innovate NI (16%).

# Appendix – Technical Report

The 2024 MBIS was conducted 11th January – 3rd April using a computer assisted telephone interviewing (CATI) methodology. In addition to being a replication of the methodology used for the 2014 edition of the survey, this approach offered the opportunity to optimise the responses from micro businesses who may not be familiar with innovation and/or have limited time. Furthermore, targeting specific respondent types can be managed efficiently via CATI, helping to facilitate the process of achieving the representation necessary for this survey.

The questionnaire that was used was based largely on that used in 2014, allowing for a like-for-like comparison of results in many instances (the 2014 questionnaire was heavily influenced by the UK Innovation Survey). However, the questionnaire was curtailed to a length of between 12-15 minutes as it was felt that a longer questionnaire would run the risk of respondent fatigue impacting the quality of the data collected.

The questionnaire was administered by members of Cognisense's telephone interviewing team – all of whom had been trained in line with the Interviewer Quality Control Scheme and the Market Research Quality Standards Authority – using the interviewing software NIPO, which offers the following features:

- Extensive routing, data validation and consistency checking, which minimises the potential for interviewer error affecting the data collected.
- Rotations, randomisation and inversions of questions, which significantly reduces the likelihood of running order having an impact on response choices.
- Dynamic question and answer texts, which enhances the flow of questionnaires, helping to maintain respondent engagement.
- Updating and retrieving information in the sample database, which improves the efficiency of data collection, therefore shortening fieldwork periods.
- Automatic sample, quota, appointment and response management, which facilitates sample management, allows for the targeting of particular respondents, and affords the opportunity for individuals to select the time that best suits them for participation, thereby increasing response rates.
- Output to Excel, which enables the data collected to be viewed in a userfriendly fashion.

In order to target relevant businesses, a database of telephone numbers was purchased from a reputable supplier based on the SIC codes relevant for this survey. To make sure that only suitable individuals from businesses of appropriate size were interviewed, the survey questionnaire was prefaced with a series of screener questions, which included one to determine whether the individual was the most senior person within the organisation, and one to establish the total number of employees at the company.

To ensure appropriate representation of relevant businesses, quota targets were employed based on the Office for National Statistics' Inter-Departmental Business Register (IDBR) 2023. The targets and interviews achieved were as follows:

1-4 employees	Target	Achieved
Production and construction		
SIC 05-09 - Mining and quarrying	1	1
SIC 10-18 - Food, clothing, wood, paper, publishing and		
printing	18	18
SIC 19-25 - Fuels, chemicals, plastic, metals and minerals	21	22
SIC 26-28 - Electrical and optical equipment	6	5
SIC 29-30 - Transport equipment	2	2
SIC 31-33 - Manufacturing not elsewhere classified	18	18
SIC 35-39 - Electricity, gas and water supply	15	8
SIC 41-43 - Construction	191	189
Distribution and services		
SIC 45-46 - Wholesale trade (including cars and bikes)	103	95
SIC 47 - Retail trade (excluding cars and bikes)	93	83
SIC 49-53, 61 - Transport, storage and communication	45	44
SIC 55-56 - Hotels and restaurants	59	58
SIC 64-66 - Financial intermediation	15	15
SIC 58, 62, 63, 68-82 - Real estate, renting and business		
activities	254	252
SIC 59-60 - Motion picture and video production	8	8

5-9 employees	Target	Achieved
Production and construction		
SIC 05-09 - Mining and quarrying	0	0
SIC 10-18 - Food, clothing, wood, paper, publishing and		
printing	5	8
SIC 19-25 - Fuels, chemicals, plastic, metals and minerals	5	6
SIC 26-28 - Electrical and optical equipment	1	3
SIC 29-30 - Transport equipment	1	1
SIC 31-33 - Manufacturing not elsewhere classified	3	3
SIC 35-39 - Electricity, gas and water supply	2	2
SIC 41-43 - Construction	21	24
Distribution and services		
SIC 45-46 - Wholesale trade (including cars and bikes)	18	27
SIC 47 - Retail trade (excluding cars and bikes)	22	32
SIC 49-53, 61 - Transport, storage and communication	9	9
SIC 55-56 - Hotels and restaurants	25	24
SIC 64-66 - Financial intermediation	4	2
SIC 58, 62, 63, 68-82 - Real estate, renting and business		
activities	33	40
SIC 59-60 - Motion picture and video production	1	1

The sample achieved was deemed suitably representative so that no weighting was required.

To maximise response rates, interviewing shifts were scheduled to cover both office hours and evenings (up to 8pm). In addition, individuals unable to participate when contacted originally were offered the opportunity to select a time that would better suit them to take part – all such appointments were honoured.

The response overview for the survey was as follows:

Successful interview	1000
Unused	4914
Refusal to participate	1279
Total contacts	7193

All individuals were informed that their responses would be treated confidentially and that all data would be handled in accordance with General Data Protection Regulation, Data Protection legislation, and the Market Research Society's Code of Conduct; they were also advised that participation was entirely voluntary, that they were free to terminate the interview at any point and that they could request that any information provided be deleted. If an individual declared that they did not want to take part in the research, their details were removed from the telephone database, so that they were not contacted again. In addition, individuals were read a TinyURL which they could use to access the privacy notice for the MBIS published on the Department for the Economy's website<sup>4</sup>.

Initially, a pilot survey was conducted, during which 24 interviews were administered so that real data could be used to check that the questionnaire was functioning correctly. This process allowed for an in-depth assessment of the content of the questionnaire and offered the chance to make refinements before the survey launched in full. Once any amendments deemed necessary by the pilot were made, the main body of survey fieldwork commenced.

Immediately following the completion of fieldwork, the process of data analysis began. All analysis was conducted in-house using software developed by NIPO specifically to meet the needs of market research professionals. The analysis involved the coding of all open-ended questions in the survey, as well as crosstabulations of the data by relevant demographics. (Given the very high number (96%) of micro businesses that stated they were family owned, analysis by this demographic was not included in the report.)

Upon completion of the data analysis, raw, clean, anonymised data, which included all interesting cross-tabulations was made available in Excel format, with all percentages having been rounded to the nearest whole number.

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<sup>&</sup>lt;sup>4</sup> Micro business innovation survey 2024 - privacy notice (economy-ni.gov.uk)